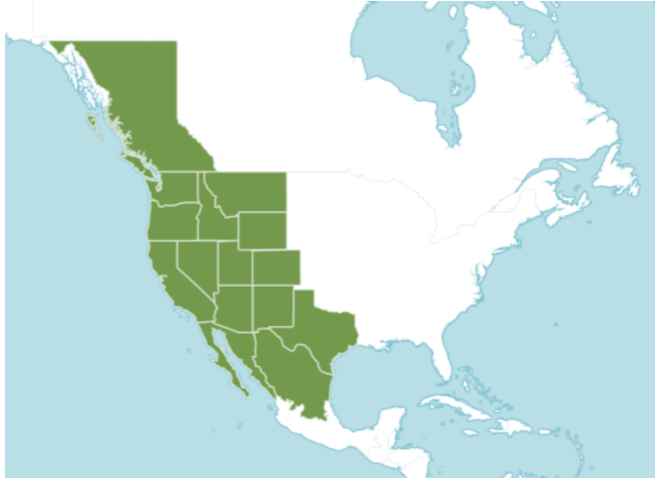


## Plant Propagation Protocol for *Lathyrus lanszwertii*

ESRM 412 – Native Plant Production

URL: <https://courses.washington.edu/esrm412/protocols/2023/LALA3.pdf>

TAXONOMY	
Plant Family	
Scientific Name	Fabaceae Lindl. <sup>7</sup>
Common Name	peas, legumes <sup>4</sup>
Species Scientific Name	
Scientific Name	Genus: <i>Lathyrus</i> Species: <i>lanszwertii</i> Species authority: Kellogg <sup>7</sup>
Varieties	<i>Lathyrus lanszwertii</i> var. <i>leucanthus</i> (Rydb.) Dorn <sup>4</sup>
Sub-species	No Information Available
Cultivar	No Information Available
Common Synonym(s)	<i>Lathyrus leucanthus</i> Rydb. <sup>4,11</sup> <i>Lathyrus arizonicus</i> Britton <sup>4,5,11</sup> <i>Lathyrus lanszwertii</i> var. <i>arizonicus</i> (Britton) S.L. Welsh <sup>4,5</sup> <i>Lathyrus lanszwertii</i> var. <i>leucanthus</i> (Rydb.) Dorn <sup>4</sup>
Common Name(s)	Nevada pea, aspen peavine, Arizona peavine <sup>4,7</sup>
Species Code (as per USDA Plants database)	LALA3
GENERAL INFORMATION	
Geographical range	<p><i>Lathyrus lanszwertii</i> occurs along the western regions of the United States, being found in Washington, Oregon, Idaho, California, Nevada, Utah, Wyoming, Colorado, Arizona, New Mexico, and a small part of western Texas.<sup>5,10,12</sup> It can also be found in British Columbia, and parts of northeast and northwest Mexico.<sup>5</sup></p>  <p>Photo courtesy of the Kew Royal Botanic Gardens<sup>5</sup></p>

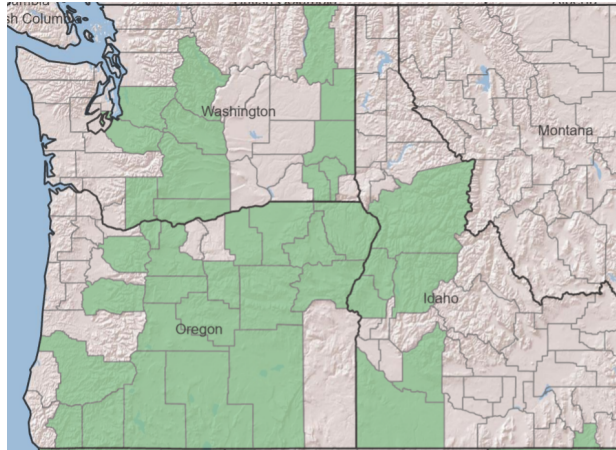


Photo courtesy of the USDA Plants Database<sup>7</sup>

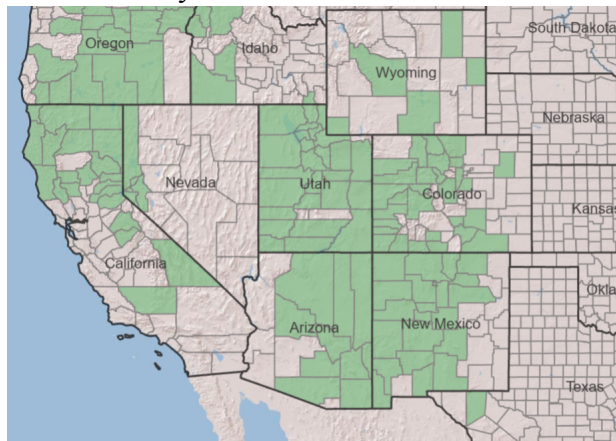


Photo courtesy of the USDA Plants Database<sup>7</sup>

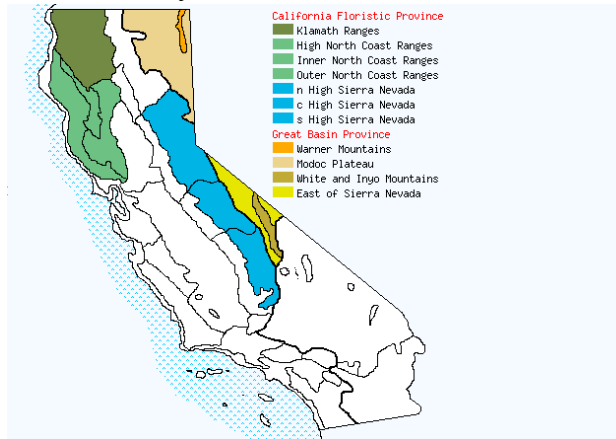
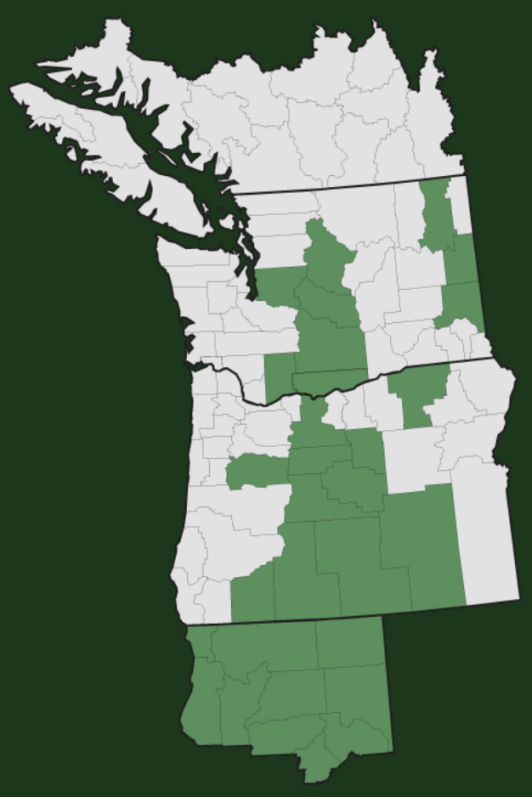


Photo courtesy of UC Berkeley<sup>10</sup>

	 <p>Photo courtesy of Turner Photographics<sup>15</sup></p>
Ecological distribution	Grows primarily in temperate areas, including open slopes, pine forests, dry mostly coniferous woodlands, and meadows. <sup>2,9,10</sup>
Climate and elevation range	<p><i>Lathyrus lanszwertii</i> prefers annual precipitation of around 25.8" - 117.4."<sup>3</sup> Based on its geographic range it prefers a dryer climate than the temperate rain forests of western North America, but it does not grow in deserts or areas of equally low precipitation.<sup>3</sup> It grows at low to mid-elevations ranging from 650 - 6550 feet (200 - 2000 meters).<sup>9,10</sup> Other sources state that its elevation range is 3940 - 6560 feet (1200 - 2000 meters).<sup>2,3</sup> Organizations in California and Arizona provided this elevation data, but it is unclear what parts of North America were observed. This discrepancy in elevation may be caused by studies of <i>Lathyrus lanszwertii</i> being done at different latitudes and longitudes.</p>
Local habitat and abundance	<p>Species commonly associated with <i>Lathyrus lanszwertii</i> are shrub species like <i>Artemisia tridentata</i>, <i>Purshia tridentata</i>, rabbitbrush (<i>Chrysothamnus</i> spp. and <i>Ericameria</i> spp.), mountain mahogany (<i>Cercocarpus</i> spp.), and snakeweed (<i>Gutierrezia</i> spp.).<sup>6</sup> Canopy species include <i>Pinus jeffreyi</i>, <i>Pinus lambertiana</i>, <i>Pinus monticola</i>, <i>Pinus contorta</i>, <i>Pseudotsuga menziesii</i>, and <i>Calocedrus</i></p>


	<p><i>decurrens</i>.<sup>8</sup> Associated understory species include <i>Lithocarpus densiflorus</i> var. <i>echinoides</i>, <i>Quercus vaccinifolia</i>, <i>Arctostaphylos nevadensis</i>, and <i>Picea breweriana</i>.<sup>8</sup></p>
Plant strategy type / successional stage	<p>There is limited information available on plant strategies for <i>Lathyrus lanszwertii</i> and their successional stage, but what is available is information on fire ecology. In a study focusing on the effects wildfires have on an understory, <i>Lathyrus lanszwertii</i> is referred to as an indicator species in an understory.<sup>1</sup> The study performed prescribed burning of the land, with different levels of severity, while setting land aside as a control where no burning was done.<sup>1</sup> <i>Lathyrus lanszwertii</i> was the most common indicator species in the control area, which may mean that it is not fire tolerant compared to other understory species it shares an ecosystem with.<sup>1</sup></p>
Plant characteristics	<p><i>Lathyrus lanszwertii</i> is a perennial plant that is considered a Forb/herb/Vine.<sup>7,11</sup> Its stems are angled and can either ascend or climb.<sup>2</sup> The flowers of this species come in whitish to purplish shades, featuring distinctive pink-purple lines.<sup>9</sup> Unlike other plants in the <i>Lathyrus</i> genus, <i>Lathyrus lanszwertii</i> has erect trailing stems.<sup>9</sup></p>  <p>Photo © Gary A. Monroe<sup>7</sup></p>



Photo © Gary A. Monroe<sup>7</sup>

### PROPAGATION DETAILS

Ecotype	No Information Available
Propagation Goal	Seeds
Propagation Method	Seed
Product Type	Container
Stock Type	
Time to Grow	No Information Available
Target Specifications	Available information on <i>Lathyrus lanszwertii</i> and its target specifications only state that a mature individual typically reaches a height of 1 to 3 feet (30 to 90 cm). <sup>9</sup> There is no available information on size relating to propagation, but it likely does not reach the size of a mature individual within one year of growth.
Propagule Collection Instructions	Not much information is available on when to collect seeds from <i>Lathyrus lanszwertii</i> , but the flowers typically bloom in late spring and early summer (May, Jun, Jul, Aug) depending on geographical range and climate. <sup>9,11</sup>
Propagule Processing/Propagule Characteristics	<i>Lathyrus lanszwertii</i> produces a long, flat, oval legume/pod that breaks open. <sup>9</sup> Each pod has one to several kidney shaped, smooth and hard seeds. <sup>9</sup> No information available on size, weight, and longevity is currently available.
Pre-Planting Propagule Treatments	There is no information available <i>Lathyrus lanszwertii</i> , but other members of the genus like <i>Lathyrus nevadensis</i> , which has a similar geographic range and ecological distribution, require seeds to be scarified and/or stratified. <sup>16</sup> More studies need to be done on this species to clarify its pre-planting propagule treatments.
Growing Area Preparation / Annual Practices for Perennial Crops	No Information Available
Establishment Phase Details	No Information Available

Length of Establishment Phase	No Information Available
Active Growth Phase	No Information Available
Length of Active Growth Phase	No Information Available
Hardening Phase	No Information Available
Length of Hardening Phase	No Information Available
Harvesting, Storage and Shipping	No Information Available
Length of Storage	No Information Available
Guidelines for Outplanting / Performance on Typical Sites	No Information Available
Other Comments	Very little information is available for <i>Lathyrus lanszwertii</i> , even members of the same genus that have similar geographic range and ecological distribution have limited propagation studies. Much of the available information for this species is seemingly based on observation. More research needs to be done on <i>Lathyrus lanszwertii</i> and other members of the <i>Lathyrus</i> genus. <sup>13,14</sup>

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